# 8. SEATTLE-VASHON PASSENGER-ONLY INCLUDING SEATTLE-SOUTHWORTH TRAVEL

The Seattle-Vashon passenger-only ferry provides weekday service primarily for commuters traveling between downtown Seattle and Vashon Island. In addition, it provides a connection for foot passengers transferring to/from south Kitsap County via the Southworth-Vashon auto ferry. While the boarding counts do not indicate the distribution of travel between these two groups, survey responses for the weekday PM peak period indicate that at least one-third of all westbound Seattle-Vashon passengers transferred to or from the Southworth-Vashon ferry at Vashon Island.<sup>4</sup> Most of the Seattle-Vashon riders were traveling westbound in the PM peak period, with transferees continuing on to Southworth via the Southworth-Vashon ferry.

The Seattle-Vashon route is 8.5 nautical miles in length with a crossing time of approximately 30 minutes. The route operates weekdays primarily during the AM and PM peak periods, with service suspended during between late morning and mid afternoon, and consequently, it exhibits nearly unidirectional ridership in the peak commute direction.

In 2003, average weekday ridership was 827 passengers, based upon a five day operating week. This compares to average daily ridership of 1,015 passengers in 1999 over a six day operating week, and represents a 19% decrease in daily ridership.<sup>5</sup>

During October 2003, the month in which the survey was conducted, average weekday ridership totaled 941 passengers. PM peak period ridership on the survey day, October 15, 2004, was estimated via boarding counts at 396 patrons, or about 20% less than in 1999. Of the 396 patrons, approximately 129 (one-third) made a transfer to/from the Seattle-Southworth passenger-only route.

Given the significant number and distinctly different travel patterns of the transferring passengers, this chapter presents the survey results for the Seattle-Vashon passenger-only route by two segments: passengers traveling between Seattle and Vashon, and passengers traveling between Seattle and Southworth via a transfer at Vashon. The latter group includes responses gathered from both the Seattle-Vashon and Southworth-Vashon routes.

"... this chapter presents the survey results for the Seattle-Vashon passenger-only route by two segments: passengers traveling between Seattle and Vashon, and passengers traveling between Seattle and Southworth..."

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<sup>&</sup>lt;sup>4</sup> Survey day boarding counts at Southworth and Coleman Dock do not provide information on the travelers' ultimate destinations. Table 2-2 provides information on the number of respondents making a transfer at Vashon Island and applies this to estimate the total PM Peak ridership by terminal pairs.

<sup>&</sup>lt;sup>5</sup> Actually, the decrease is likely in excess of 19% comparing only weekdays, given that relatively low ridership for the Saturday service still in operation during 1999 tends to lower the overall daily average in 1999. Saturday service was discontinued after June 30, 2000.

#### 8.1 TRIP MAKING INFORMATION

# **Weekday Trip Statistics**

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Origin and destination types; and
- Ferry access/egress travel modes.

The focus of these results is primarily on the PM peak survey period, contrasting the peak results to the PM non-peak period for key items such as trip purpose and wait times.

## <u>Trip Purpose – Vashon Travel Only</u>

The trip purpose and frequency for the 2003 and 1999 weekday PM peak period for Seattle-Vashon travel on the passenger-only route are summarized in Table 8-1 and Table 8-2, respectively. It is evident that this route primarily serves commuters during the PM peak period. The overriding majority of riders were traveling during the PM peak for work/school/business purposes, with nearly 90% reporting work/school/business travel in 2003 and 86% in 1999. The frequency of use exhibited by these PM peak travelers also suggests most are regular users, with close to 70% making 10 or more one-way trips during the past seven days, similar to the 1999 results. Ferry travelers reporting social/recreational/shopping/sight-seeing purposes appear to be traveling by ferry more frequently, with approximately 55% reporting six or more rides in the past seven days in 2003, up from 29% in 1999.

Table 8-1
Trip Purpose and Frequency of Use Distribution
Seattle-Vashon Passenger-Only — Weekday PM Peak Period (2003)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	0.0%	0.0%	15.6%	1.3%	3
2 to 5 Rides in Past 7 Days	13.4%	79.1%	29.5%	16.8%	45
6 to 9 Rides in Past 7 Days	19.1%	0.0%	37.3%	20.1%	54
10 or More Rides in Past 7 Days	67.4%	20.9%	17.6%	61.8%	165
No Answer	0.0%	0.0%	0.0%	0.0%	0
Totals	100.0%	100.0%	100.0%	100.0%	267
Overall Trip Purpose Distribution	88.5%	3.1%	8.3%	100.0%	
Expanded Ridership	236	8	22	267	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 8-2
Trip Purpose and Frequency of Use Distribution
Seattle-Vashon Passenger-Only — Weekday PM Peak Period (1999)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	3.7%	12.7%	10.1%	4.8%	15
2 to 5 Rides in Past 7 Days	5.5%	74.5%	50.2%	13.4%	43
6 to 9 Rides in Past 7 Days	18.4%	0.0%	29.5%	18.1%	58
10 or More Rides in Past 7 Days	69.6%	12.7%	0.0%	60.5%	195
No Answer	2.7%	0.0%	10.1%	3.2%	10
Totals	100.0%	100.0%	100.0%	100.0%	322
Overall Trip Purpose Distribution	85.8%	6.3%	7.9%	100.0%	
Expanded Ridership	277	20	25	322	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 8-3 and Table 8-4 summarize 2003 and 1999 trip purpose and frequency of travel during the weekday PM non-peak period. Work/school/business was the most common trip purpose for 94% of riders, which is nearly identical to the 95% response in 1999. However, PM non-peak ridership for Seattle-Vashon travel is about one-third of what it was in 1999, down from 100 riders in 1999 to 32 riders in 2003. Additionally, the share of riders reporting 10 or more one-way trips in the past seven days has dropped to 68% in 2003, down from 77% in 1999.

Table 8-3
Trip Purpose and Frequency of Use Distribution
Seattle-Vashon Passenger-Only — Weekday PM Non-Peak Period (2003)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	0.0%	50.0%	0.0%	3.1%	1
2 to 5 Rides in Past 7 Days	11.4%	50.0%	0.0%	13.8%	4
6 to 9 Rides in Past 7 Days	16.1%	0.0%	0.0%	15.1%	5
10 or More Rides in Past 7 Days	72.5%	0.0%	0.0%	68.0%	22
No Answer	0.0%	0.0%	0.0%	0.0%	0
Totals	100.0%	100.0%	0.0%	100.0%	32
Overall Trip Purpose Distribution	93.8%	6.2%	0.0%	100.0%	
Expanded Ridership	30	2	0	32	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 8-4

Trip Purpose and Frequency of Use Distribution

Seattle-Vashon Passenger-Only — Weekday PM Non-Peak Period (1999)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	0.0%	0.0%	0.0%	0.0%	0
2 to 5 Rides in Past 7 Days	3.7%	33.3%	0.0%	5.2%	5
6 to 9 Rides in Past 7 Days	14.7%	0.0%	0.0%	13.9%	14
10 or More Rides in Past 7 Days	78.0%	66.7%	0.0%	77.4%	78
No Answer	3.7%	0.0%	0.0%	3.5%	3
Totals	100.0%	100.0%	0.0%	100.0%	100
Overall Trip Purpose Distribution	94.8%	5.2%	0.0%	100.0%	
Expanded Ridership	95	5	0	100	

 $<sup>^{\</sup>star}\,$  1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

# <u>Trip Origin and Destination Types - Vashon Travel Only</u>

Trip origin and destination types by direction are presented in Table 8-5 and Table 8-6 during the 2003 and 1999 weekday PM peak periods, respectively. The vast majority of riders were traveling from work/school to their home, with most heading westbound to Vashon Island. Eastbound riders reported slightly more diverse destinations in 2003, while 95% of riders in the westbound direction reported traveling from work/school to home, up

from 88% in 1999. In contrast, the share of eastbound travelers reporting work/school to home travel dropped from 50% in 1999 to 28% in 2003. However, the total share of travel to all destinations originating from work/school remained at roughly 50% of all eastbound travel for both survey years.

Table 8-5
Trip Origin and Destination Types by Direction
Seattle-Vashon Passenger-Only — Weekday PM Peak Period (2003)

Origin & Destina	ation Types	Destination	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	0.0%	0.0%	0.0%	0
	Work/School	0.0%	0.8%	0.7%	2
	Other	44.4%	0.8%	7.2%	19
Work/School	Home	27.8%	95.4%	85.4%	228
	Work/School	5.6%	0.0%	0.8%	2
	Other	16.7%	0.0%	2.5%	7
Other	Home	5.6%	3.1%	3.4%	9
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.0%	0.0%	0
Totals		100.0%	100.0%	100.0%	267
Travel Directio	n Distribution	14.8%	85.2%	100.0%	
Expanded Ride	Expanded Ridership		228	267	

Table 8-6
Trip Origin and Destination Types by Direction
Seattle-Vashon Passenger-Only — Weekday PM Peak Period (1999)

Origin & Destina	ntion Types	<u>Destination</u>	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	0.0%	0.9%	0.8%	3
	Work/School	5.6%	0.9%	1.6%	5
	Other	38.9%	2.8%	7.7%	25
Work/School	Home	50.0%	88.0%	82.8%	267
	Work/School	0.0%	0.0%	0.0%	0
	Other	5.6%	0.0%	0.8%	2
Other	Home	0.0%	6.5%	5.6%	18
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.9%	0.8%	3
Totals Travel Directio Expanded Ride		100.0% 13.7% 44	100.0% 86.3% 278	100.0% 100.0% 322	322

## Travel Modes - Vashon Travel Only

This section presents the survey responses related to trip patterns with respect to modes of access and egress to the ferry, all of which are aggregated across both travel directions.

Table 8-7 and Table 8-8 present the access and egress modes to the ferry for 2003 and 1999 PM peak period Seattle-Vashon passenger-only patrons. Unlike other south Sound routes, passengers on this route either walked or bicycled to the ferry, at 58% in 2003 and 64% in 1999. This reflects the unidirectional nature of PM peak travel on this route and the variety of trip origins within walking distance of the Seattle Pier 50 passenger-only terminal.

In contrast, the number of riders that reported leaving the ferry terminal as a pedestrian or bicyclist was considerably less than those accessing the terminal. Just over half the riders reported using a vehicle to egress the terminal and just under 30% reported leaving by bus or shuttle, which is slightly opposite of the 1999 results. In 2003, no survey respondents reported boarding the ferry on a bicycle, down slightly from the 3% reported in 1999.

Note that in some cases, the results for access and egress responses are not always as statistically robust. In many instances these questions can be confusing to the survey respondent and they may skip them, or respondents may run out of time. As a result of potential errors and/or incomplete responses, apparent differences in access/egress results between 1999 and 2003 may overstate the true differences.

Table 8-7
Access Mode to Ferry — Boarding Method — Egress Mode from Ferry Seattle-Vashon Passenger-Only — Weekday PM Peak Period (2003)

Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	57.8%	Walked-On		100.0%	Pedestrian/Bicycle	17.8%
By Vehicle*	21.3%	Pedestrian	100.0%		By Vehicle*	53.5%
By Bus or Shuttle	20.9%	Pedestrian w/ Bicycle	0.0%		By Bus or Shuttle	28.7%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	N/A	In-Vehicle		N/A	In-Vehicle	N/A
		Total		100.0%		
		Expanded Ridership To	tal	267		

Table 8-8
Access Mode to Ferry — Boarding Method — Egress Mode from Ferry Seattle-Vashon Passenger-Only — Weekday PM Peak Period (1999)

Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	63.8%	Walked-On		100.0%	Pedestrian/Bicycle	17.3%
By Vehicle*	14.8%	Pedestrian	96.9%		By Vehicle*	46.2%
By Bus or Shuttle	21.4%	Pedestrian w/ Bicycle	3.1%		By Bus or Shuttle	36.5%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	N/A	In-Vehicle		N/A	In-Vehicle	N/A
		Total		100.0%		
		Expanded Ridership To	tal	322		

<sup>\*</sup> includes motorcycles

# <u>Trip Purpose – Vashon Transfer Travel</u>

PM peak period ridership for Seattle-Southworth travel, via a transfer between the Seattle-Vashon and Southworth-Vashon routes has declined since 1999. Of interest is the fact that Seattle-Southworth travel has declined by a larger margin that has Seattle-Vashon travel, at about 33% compared to a 17% reduction in Seattle-Vashon travel since 1999. This suggests that the relatively high fare increases experienced on the passenger-only route since 1999 (100% for the full fare, and 128% for the commuter/frequent user discounted fare) have had a greater dampening impact on travel to/from the Kitsap Peninsula than to/from Vashon

Island. This is not surprising, given the lower level of service for the transfer routing and that there are other (lower fare) ferry options between the Kitsap Peninsula and Seattle.

The trip purpose and frequency during the 2003 and 1999 weekday PM peak period for the passengers traveling between Seattle and Southworth via Vashon Island are summarized in Table 8-9 and Table 8-10, respectively. From these tables, it is evident that nearly all of the foot passengers making the transfer at Vashon are commuters. The vast majority of riders are traveling for work/school/business reasons, at 97%, very similar to 1999 results. As would be expected, these riders also travel quite frequently, with approximately 80% reporting six or more one-way rides in the past seven days and 60% reporting 10 or more rides.

Table 8-9
Trip Purpose and Frequency of Use Distribution
Seattle-Southworth via Vashon — Weekday PM Peak Period (2003)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	0.0%	0.0%	0.0%	0.0%	0
2 to 5 Rides in Past 7 Days	19.4%	0.0%	66.7%	20.4%	42
6 to 9 Rides in Past 7 Days	19.3%	0.0%	0.0%	18.7%	38
10 or More Rides in Past 7 Days	59.5%	0.0%	33.3%	58.4%	119
No Answer	1.8%	100.0%	0.0%	2.5%	5
Totals	100.0%	100.0%	100.0%	100.0%	204
Overall Trip Purpose Distribution	96.6%	0.8%	2.5%	100.0%	
Expanded Ridership	197	2	5	204	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 8-10
Trip Purpose and Frequency of Use Distribution
Seattle-Southworth via Vashon — Weekday PM Peak Period (1999)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	9.6%	0.0%	0.0%	9.6%	29
2 to 5 Rides in Past 7 Days	10.2%	0.0%	0.0%	10.2%	31
6 to 9 Rides in Past 7 Days	14.7%	0.0%	0.0%	14.7%	45
10 or More Rides in Past 7 Days	64.5%	0.0%	0.0%	64.5%	196
No Answer	0.8%	0.0%	0.0%	0.8%	3
Totals	100.0%	0.0%	0.0%	100.0%	304
Overall Trip Purpose Distribution	100.0%	0.0%	0.0%	100.0%	
Expanded Ridership	304	0	0	304	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

## <u>Trip Origin and Destination Types – Vashon Transfer Travel</u>

Table 8-11 and Table 8-12 summarize the 2003 and 1999 trip purpose and frequency of use for the Seattle-Southworth via Vashon travelers during the weekday PM non-peak period. PM non-peak period ridership declined by one-half between 1999 and 2003, or down from about 100 to approximately 50 riders. However, this percentage drop is less than that experienced for Seattle-Vashon PM non-peak travel, which dropped by two thirds between 1999 and 2003.

Despite the drop in overall ridership, the frequency of ridership has increased since 1999, up from 75% reporting six or more one-way rides to 95% in 2003, which suggests that much of the decline in ridership came from infrequent users. Note that these results are based on relatively small samples, and thus true differences may be somewhat more or less than those indicated.

Similar to riders traveling during the PM peak period, work/school/business was the only trip purpose reported by PM non-peak riders in 2003, as was the case in 1999. The lack of non-commute trip purposes suggests that this primarily commuter-oriented service requiring a transfer at Vashon is not the best alternative for those making trips for social, shopping, recreational, and/or personal appointment reasons, particularly since a vehicle may be required for many such trips.

Table 8-11

Trip Purpose and Frequency of Use Distribution

Seattle-Southworth via Vashon — Weekday PM Non-Peak Period (2003)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	0.0%	0.0%	0.0%	0.0%	0
2 to 5 Rides in Past 7 Days	4.8%	0.0%	0.0%	4.8%	2
6 to 9 Rides in Past 7 Days	19.2%	0.0%	0.0%	19.2%	10
10 or More Rides in Past 7 Days	76.0%	0.0%	0.0%	76.0%	39
No Answer	0.0%	0.0%	0.0%	0.0%	0
Totals	100.0%	0.0%	0.0%	100.0%	51
Overall Trip Purpose Distribution	100.0%	0.0%	0.0%	100.0%	
Expanded Ridership	51	0	0	51	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 8-12

Trip Purpose and Frequency of Use Distribution

Seattle-Southworth via Vashon — Weekday PM Non-Peak Period (1999)

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	11.9%	0.0%	0.0%	11.9%	12
2 to 5 Rides in Past 7 Days	13.6%	0.0%	0.0%	13.6%	14
6 to 9 Rides in Past 7 Days	3.4%	0.0%	0.0%	3.4%	3
10 or More Rides in Past 7 Days	71.2%	0.0%	0.0%	71.2%	73
No Answer	0.0%	0.0%	0.0%	0.0%	0
Totals	100.0%	0.0%	0.0%	100.0%	103
Overall Trip Purpose Distribution	100.0%	0.0%	0.0%	100.0%	
Expanded Ridership	103	0	0	103	

 $<sup>^{\</sup>star}\,$  1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

The types of trip origins and destinations by direction are presented in Table 8-13 and Table 8-14 for the 2003 and 1999 weekday PM peak periods, respectively. The vast majority of riders were traveling from work/school to their home with most heading westbound toward the Kitsap Peninsula. Westbound riders reporting that they were coming from "some other place" and going home increased by about seven percentage points between 1999 and 2003, a large increase in percentage change terms. However, as reported in 1999,

over 90% of all riders reported traveling from work/school to home. All riders in the eastbound direction were traveling from a work/school origin, compared to all home origins in 1999. While interesting, this difference may not actually represent a true change in traveler behavior, because there are so few riders in the eastbound direction.

Table 8-13
Trip Origin and Destination Types by Direction
Seattle-Southworth via Vashon — Weekday PM Peak Period (2003)

Origin & Destina	ation Types	<u>Destination</u>	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	0.0%	0.0%	0.0%	0
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.0%	0.0%	0
Work/School	Home	100.0%	92.7%	92.9%	190
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.0%	0.0%	0
Other	Home	0.0%	7.3%	7.1%	14
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.0%	0.0%	0
Totals		100.0%	100.0%	100.0%	204
Travel Directio	n Distribution	3.1%	96.9%	100.0%	
Expanded Ride	ership	6	198	204	

Table 8-14
Trip Origin and Destination Types by Direction
Seattle-Southworth via Vashon — Weekday PM Peak Period (1999)

Origin & Destina	ntion Types	<u>Destination</u>	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	0.0%	0.9%	0.8%	3
	Work/School	66.2%	0.0%	1.6%	5
	Other	33.8%	0.0%	0.8%	3
Work/School	Home	0.0%	97.7%	95.3%	290
	Work/School	0.0%	0.9%	0.8%	3
	Other	0.0%	0.0%	0.0%	0
Other	Home	0.0%	0.6%	0.6%	2
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.0%	0.0%	0
Totals		100.0%	100.0%	100.0%	304
Travel Directio	n Distribution	2.4%	97.6%	100.0%	
Expanded Ride	ership	7	297	304	

#### Travel Modes - Vashon Transfer Travel

This section presents the survey responses related to trip patterns with respect to modes of access and egress to the ferry, all of which are aggregated across both travel directions.

Ferry terminal access and egress modes and boarding method for the 2003 and 1999 Seattle—Southworth via Vashon passengers are presented in Table 8-15 and Table 8-16, respectively, for the PM peak period. More than half walked or bicycled to the ferry, reflecting the overwhelming Seattle to Southworth travel direction in the PM peak and the large number of origins within walking distance of the Pier 50 terminal. In 2003 nearly 75% of all respondents reported accessing the terminal by walking or biking, up from 61% in 1999. Approximately 70% of 2003 respondents reported using a vehicle to depart the ferry terminal, while less than one-third left by bus or shuttle and only 3% departed by walking or biking, down from 10% in 1999.

Similar to the Seattle-Vashon findings, no respondents reported boarding the ferry vessel on a bicycle, down slightly from 2% in 1999.

Table 8-15
Access Mode to Ferry — Boarding Method — Egress Mode from Ferry
Seattle-Southworth via Vashon — Weekday PM Peak Period (2003)

Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	72.6%	Walked-On		100.0%	Pedestrian/Bicycle	3.4%
By Vehicle*	13.0%	Pedestrian	100.0%		By Vehicle*	69.2%
By Bus or Shuttle	14.4%	Pedestrian w/ Bicycle	0.0%		By Bus or Shuttle	27.4%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	N/A	In-Vehicle		N/A	In-Vehicle	N/A
		Total		100.0%		
		Expanded Ridership To	tal	204		

<sup>\*</sup> includes motorcycles

Table 8-16
Access Mode to Ferry — Boarding Method — Egress Mode from Ferry
Seattle-Southworth via Vashon — Weekday PM Peak Period (1999)

					•	•
Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	60.9%	Walked-On		100.0%	Pedestrian/Bicycle	10.2%
By Vehicle*	18.7%	Pedestrian	98.3%		By Vehicle*	59.0%
By Bus or Shuttle	20.4%	Pedestrian w/ Bicycle	1.7%		By Bus or Shuttle	30.8%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	N/A	In-Vehicle		N/A	In-Vehicle	N/A
		Total		100.0%		
		Expanded Ridership To	tal	304		
* includes motorcycles	,					

<sup>\*</sup> includes motorcycles

## 8.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. PM peak period origin-destination (O-D) trip tables by travel direction are presented as expanded PM peak ridership volumes and distributions for walk-on passenger movements between Seattle and Vashon as well as between Seattle and Southworth via a Vashon transfer. The trip tables for all modes are followed by tables indicating the differences between 1999 and 2003. Complementing the trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. These maps also include a pie chart for each district, indicating the boarding mode split by walk-on and invehicle boardings for trips originating from or destined to each district. The second set of maps illustrates the directional densities of trip origins and destinations, using different pinpoint symbols to delineate walk-on and in-vehicle boarding methods.

## **Weekday PM Peak Period Trip Patterns**

Not surprisingly given the commuter nature of this passenger-only route, the Seattle CBD was the most frequent origin for westbound Seattle-Vashon travel during the weekday PM peak period with 70% of the total trips (see Table 8-17 and Figure 8-1), a slight increase from 68% in 1999. The destinations were approximately evenly distributed between North and South Vashon Island (51% and 49% respectively). As shown in Table 8-18, while the share of trip origins in the Seattle CBD increased slightly, the actual number of westbound trips from that district decreased by 15% between 1999 and 2003. Also, the number of trip origins in the University District decreased by 80%.

The Seattle CBD was the most popular destination for eastbound trips during the weekday PM peak period with 61% of the total trips, as seen in Table 8-19 and Figure 6-2. This is an increase from the 28% seen in 1999. This increase is also reflected in Table 8-20, which shows that trips to the Seattle CBD increased by 97%. In contrast with the majority of the other Vashon routes, eastbound trip origins shifted to North Vashon Island between 1999 and 2003. In 1999, eastbound trip origins were evenly divided between North and South Vashon Island. In 2003, 72% of the trip origins were located in North Vashon Island.

Figure 8-3 provides a spatial display of westbound PM peak period trip origins and destinations for the Seattle-Vashon route, while Figure 8-4 presents the same information except for eastbound travel. As expected, the origins and destinations were concentrated around the ferry terminals on each side (though particularly so in Seattle) given the number of patrons accessing/egressing the ferry as a pedestrian, bicyclist or bus rider.

Table 8-21 and Figure 8-5 summarize the origins and destinations for the Seattle-Southworth via Vashon passengers traveling westbound during the PM peak period. The Seattle CBD was the most popular origin at 83% of all trips, and the Other South Kitsap County district was the most popular destination with 96% of the trips. As shown in Table 8-22, trips from the Seattle CBD decreased by 35% between 1999 and 2003, while trips from Capitol Hill increased by 225%. Also, while Other South Kitsap County continues to be the main destination, trips to this district decreased by 30% between 1999 and 2003.

Information on trip origins and destinations for eastbound travel during the PM peak for this route can be found in Table 8-23, Table 8-24, and Figure 8-6. The Seattle CBD was the only destination district and the Other South Kitsap County area was the only origin district. The trip origins and destinations are displayed spatially for westbound and eastbound travel in Figure 8-7 and Figure 8-8, respectively. The westbound trips were more concentrated around the Seattle CBD and more dispersed on the Kitsap Peninsula. It is difficult to make any conclusions regarding the eastbound trips, as the number of trips was so small during the PM peak period from Southworth to Seattle.

Table 8-17
Seattle-Vashon Passenger-Only O-D Trip Table
Weekday PM Peak Period — Westbound — Vashon Passengers (2003)

ORIGIN	DESTINATION	10. Worth Vashon Island	5. South Vashon Island	Origin Totals	Origin Shares
Seattle CBD	4710	87	73	160	70.2%
Capitol Hill	4711	7	5	12	5.3%
Queen Anne-Lake Union/Magnolia	4712	5	16	21	9.2%
University District	4713	3	2	5	2.3%
Ballard-Green Lake/North Seattle/Sand Point	4714	3	2	5	2.3%
Seattle Industrial Area	4715	5	9	14	6.1%
Other West King County	4716	5	5	10	4.6%
All Other Places	4717			_	0.0%
Destination Totals		116	111	228	100.0%
Destination Shares		51.1%	48.9%	100.0%	

Table 8-18
Seattle-Vashon Passenger-Only O-D Trip Table Differences 2003 vs. 1999
Weekday PM Peak Period — Westbound — Vashon Passengers

ORIGIN	DESTINATION	19.25 North Vashon Island	S South Vashon Island	Origin Totals vs. 1999	Origin Growth % vs. 1999
Seattle CBD	4710	-29	+1	-28	-15.0%
Capitol Hill	4711	+2	-3	-1	-5.6%
Queen Anne-Lake Union/Magnolia	4712	+0	+3	+3	15.6%
University District	4713	-17	-3	-21	-79.8%
Ballard-Green Lake/North Seattle/Sand Point	4714	+1	+2	+3	102.4%
Seattle Industrial Area	4715	-3	+1	-2	-10.1%
Other West King County	4716	-3	+3	+0	1.2%
All Other Places	4717		-3	-3	-100.0%
Destination Totals vs. 1999		-48	+0	-48	-17.4%
Destination Growth % vs. 1999		-29.4%	0.4%	-17.4%	

Figure 8-1
Seattle to Vashon (Westbound) PM Peak Trips by Boarding Mode (Walk-On Only)

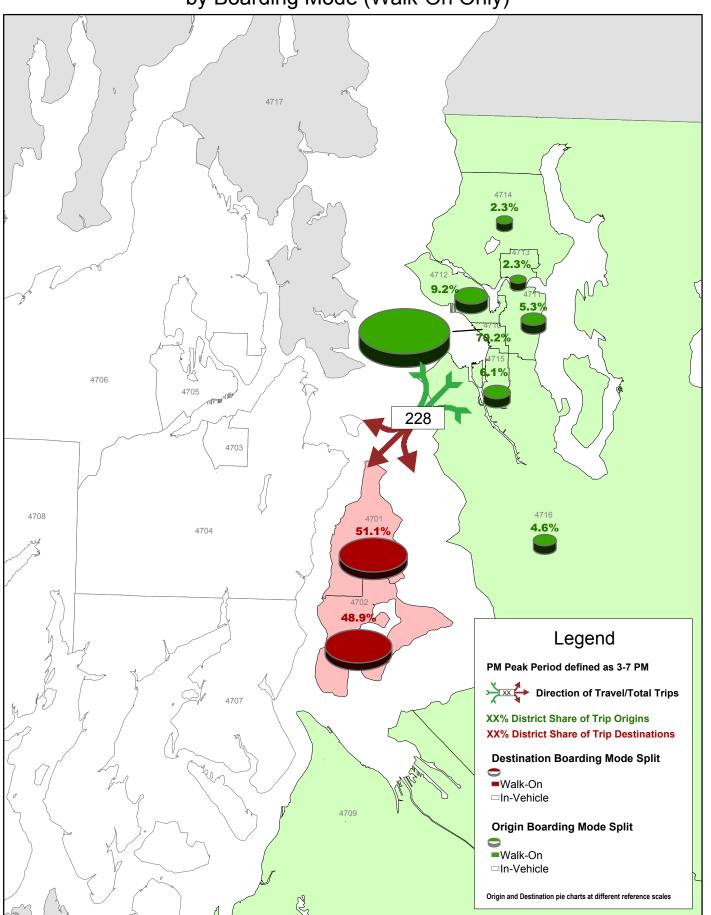


Table 8-19
Seattle-Vashon Passenger-Only O-D Trip Table
Weekday PM Peak Period — Eastbound — Vashon Passengers (2003)

ORIGIN	DESTINATION	Seattle CBD	Capitol Hill	ひueen Anne-Lake Union/Magnolia	51 University District	P Ballard-Green Lake/North Seattle/Sand Point	5 Seattle Industrial Area	91.0 Other West King County	Origin Totals	Origin Shares
North Vashon Island	4701	15	2	9		2			28	72.2%
South Vashon Island	4702	9	2						11	27.8%
Destination Totals		24	4	9	_	2	_	_	39	100.0%
<b>Destination Shares</b>		61.1%	11.1%	22.2%	0.0%	5.6%	0.0%	0.0%	100.0%	

Table 8-20 Seattle-Vashon Passenger-Only O-D Trip Table Differences 2003 vs. 1999 Weekday PM Peak Period — Eastbound — Vashon Passengers

ORIGIN	DESTINATION	o Seattle CBD	Capitol Hill	5 Oueen Anne-Lake Union/Magnolia	VIIVersity District	Point Seathe/Sand Point 44714	5 Seattle Industrial Area	9. Other West King County	Origin Totals vs. 1999	Origin Growth % vs. 1999
North Vashon Island	4701	+10	-0	+4		<b>-</b> 5		-2	+6	29.1%
South Vashon Island	4702	+1	-0		-2	-7	-2		-11	-50.3%
Destination Totals vs. 1999		+12	-1	+4	-2	-13	-2	-2	<b>-</b> 5	-10.6%
Destination Growth % vs. 1999		96.7%	-10.6%	78.8%	-100.0%	-85.1%	-100.0%	-100.0%	-10.6%	

Figure 8-2
Vashon to Seattle (Eastbound) PM Peak Trips
by Boarding Mode (Walk-On Only)

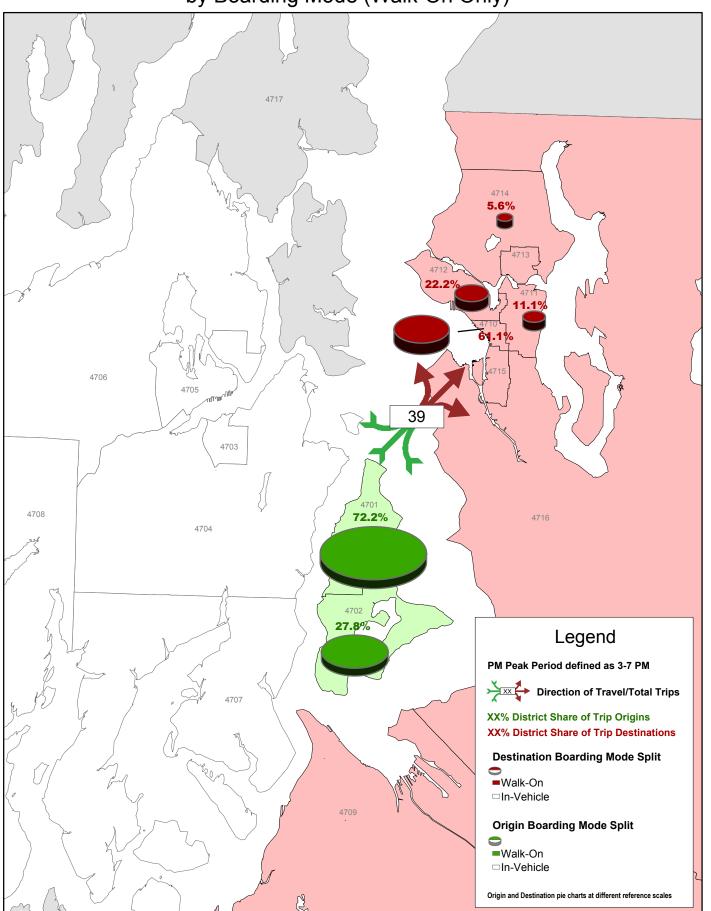


Figure 8-3
Seattle to Vashon (Westbound) PM Peak Period
Trip Origins & Destinations by Boarding Mode (Walk-On Only)

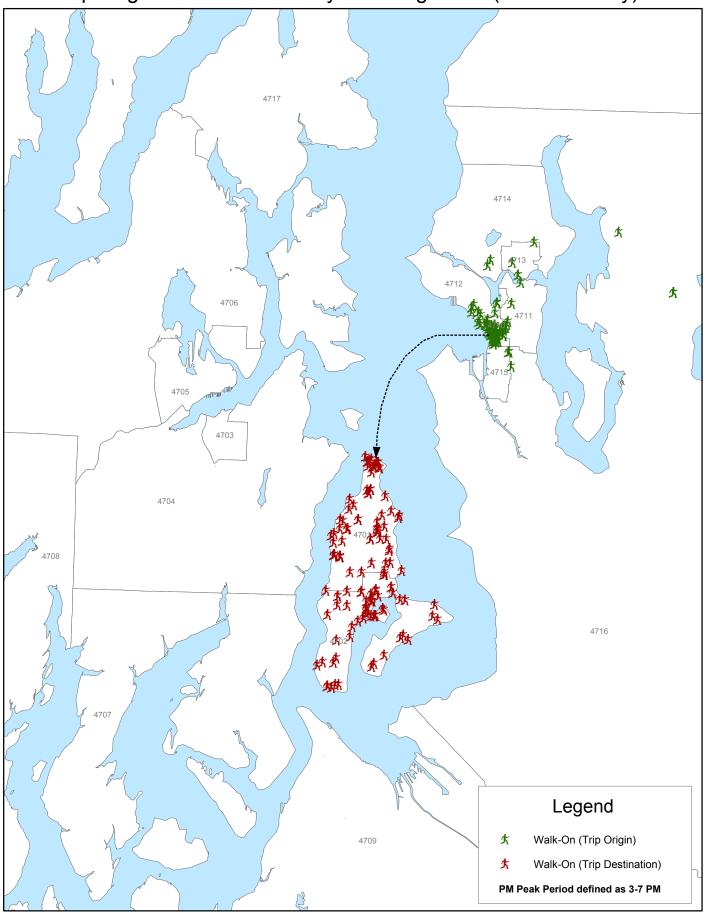


Figure 8-4
Vashon to Seattle (Eastbound) PM Peak Period
Trip Origins & Destinations by Boarding Mode (Walk-On Only)

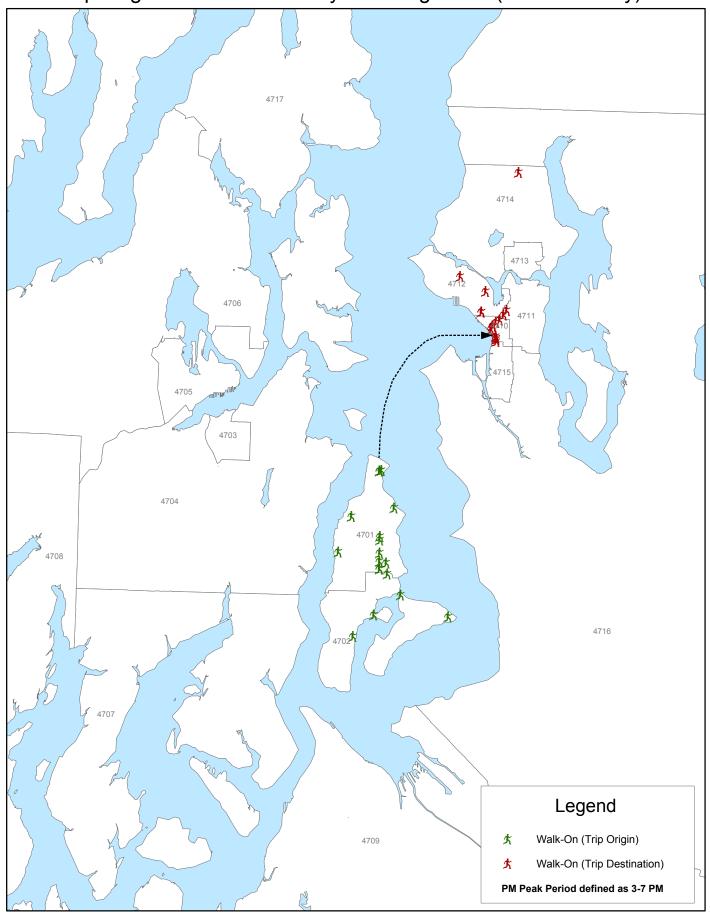


Table 8-21 Seattle–Southworth via Vashon O-D Trip Table Weekday PM Peak Period — Westbound — Transfer Passengers (2003)

ORIGIN	DESTINATION	SO Creater Port Orchard	50 Other South Kitsap County	4707 West Pierce County	4717 All Other Places	Origin Totals	Origin Shares
Seattle CBD	4710	5	155	2		162	82.6%
Capitol Hill	4711		17			17	8.5%
Queen Anne-Lake Union/Magnolia	4712		7			7	3.5%
University District	4713	2	2			3	1.8%
Ballard-Green Lake/North Seattle/Sand Point	4714		2			2	0.9%
Seattle Industrial Area	4715		3			3	1.8%
All Other Places	4717		2			2	0.9%
Destination Totals		7	188	2	_	196	100.0%
Destination Shares		3.5%	95.6%	0.9%	0.0%	100.0%	

Table 8-22 Seattle–Southworth via Vashon O-D Trip Table Differences 2003 vs. 1999 Weekday PM Peak Period — Westbound — Transfer Passengers

ORIGIN	DESTINATION	SO Leater Port Orchard	PO Other South Kitsap County	4707 West Pierce County	2 All Other Places	Origin Totals vs. 1999	Origin Growth % vs. 1999
Seattle CBD	4710	<b>–</b> 5	-67	-13	-3	-88	-35.1%
Capitol Hill	4711		+12			+12	225.4%
Queen Anne-Lake Union/Magnolia	4712		-8			-8	-52.9%
University District	4713	+2	-6			-4	-55.3%
Ballard-Green Lake/North Seattle/Sand Point	4714		-3			-3	-60.5%
Seattle Industrial Area	4715		-11			-11	-76.4%
All Other Places	4717		+2			+2	N/A
Destination Totals vs. 1999		-3	-82	-13	-3	-100	-33.9%
Destination Growth % vs. 1999		-32.9%	-30.3%	-88.2%	-100.0%	-33.9%	

Figure 8-5
Seattle to Southworth via Vashon (Westbound) PM Peak Trips
by Boarding Mode (Walk-On Only)

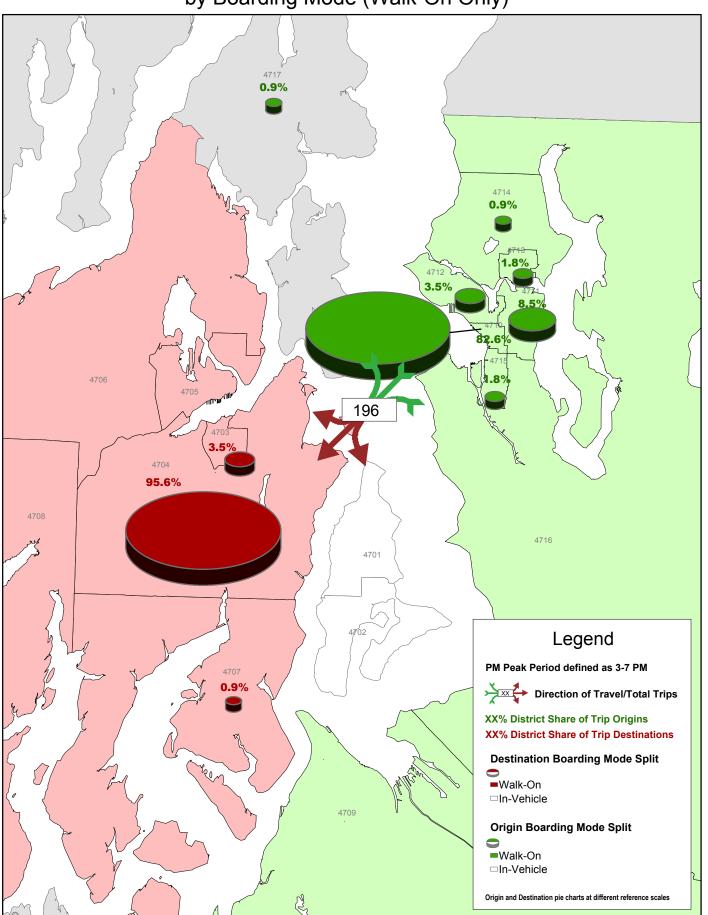


Table 8-23 Seattle-Southworth via Vashon O-D Trip Table Weekday PM Peak Period — Eastbound — Transfer Passengers (2003)

ORIGIN	DESTINATION	Seattle CBD	5 Oueen Anne-Lake Union/Magnolia	Origin Totals	Origin Shares
Other South Kitsap County	4704	6		6	100.0%
Destination Totals		6	_	6	100.0%
Destination Shares		100.0%	0.0%	100.0%	

Table 8-24
Seattle-Southworth via Vashon O-D Trip Table Differences 2003 vs. 1999
Weekday PM Peak Period — Eastbound — Transfer Passengers

ORIGIN	DESTINATION	Seattle CBD	5 Queen Anne-Lake Union/Magnolia	Origin Totals vs. 1999	Origin Growth % vs. 1999
Other South Kitsap County	4704	+1	-3	-1	-15.2%
Destination Totals vs. 1999		+1	-3	-1	-15.2%
Destination Growth % vs. 1999		28.0%	-100.0%	-15.2%	

Figure 8-6
Southworth to Seattle via Vashon (Eastbound) PM Peak Trips by Boarding Mode (Walk-On Only)

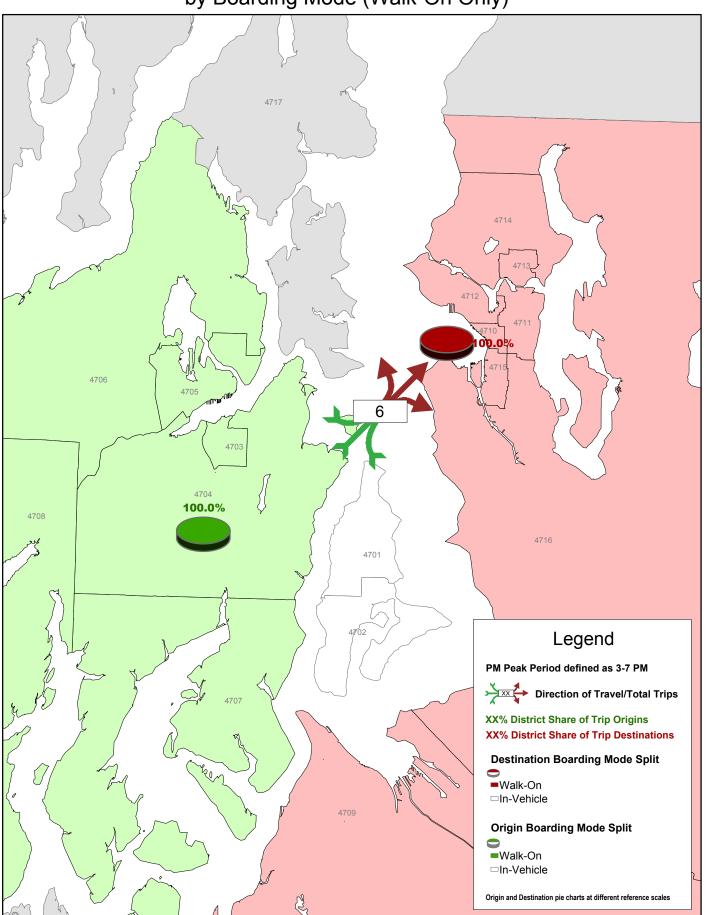


Figure 8-7
Seattle to Southworth via Vashon (Westbound) PM Peak Period
Trip Origins & Destinations by Boarding Mode (Walk-On Only)

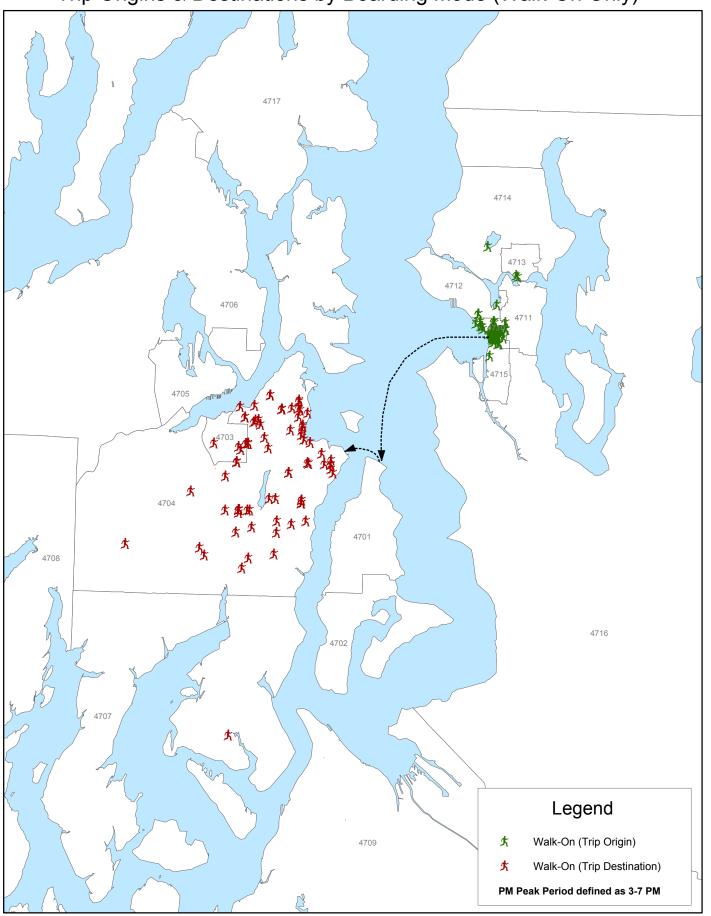


Figure 8-8
Southworth to Seattle via Vashon (Eastbound) PM Peak Period
Trip Origins & Destinations by Boarding Mode (Walk-On Only)

